

Lynch, Nebr., navigation closed 22d. Yankton, S. Dak., running ice 22d; full of ice 23d; river closed 24th. Saint Joseph, Mo., slush ice in river 23d to 28th. Kansas City, Mo., much floating ice 24th.

Monongahela River.—Lock No. 4, Pa., frozen 26th; Pittsburgh, Pa., frozen 26th.

Red River.—Saint Vincent, Minn., frozen, and ferry discontinued, 18th.

Ohio River.—Wheeling, W. Va., floating ice 26th and 27th.

Saint Croix River.—Osceola Mills, Wis., frozen 25th.

Susquehanna River.—Harrisburg, Pa., slush ice 25th.

Lock Haven, Pa., thin ice 17th; clear 22d; frozen up 25th; clear 30th.

Wabash River.—Lafayette, Ind., frozen 24th.

Wisconsin River.—Stevens Point, Wis., frozen 15th.

Lake Erie.—Sandusky, Ohio, bay frozen 25th. Toledo, Ohio, ice in river 24th; river and bay frozen over and navigation hindered 25th; river free from ice 27th.

Lake Michigan.—Chicago, Ill., harbor frozen 25th.

Lake Minnetonka.—Minneapolis, Minn., frozen over 24th, the earliest date of freezing ever known.

Lake Pepin.—Lake Pepin, Wis., frozen 23d.

ATMOSPHERIC ELECTRICITY.

THUNDERSTORMS AND AURORAS.

The table on p. 327 shows in detail for November, 1893, (1) the number of stations from which meteorological reports were received; (2) the number of such stations reporting thunderstorms (T) and auroras (A), respectively, in each state and on each day of the month on which the phenomena were observed.

THUNDERSTORMS.

Description of the more severe thunderstorms reported for the month is given under "Local storms."

The dates on which reports were most numerous are the 1st, 2d, 3d, 15th, 20th, 24th, 26th, 27th, and 29th.

The dates on which they were least numerous are the 5th, 6th, 9th, 10th, 11th, 14th, 15th, 28th, and 30th.

The states from which the most numerous thunderstorm reports were received were Florida, 30; Louisiana, 42; Texas, 35.

AURORAS.

The evenings on which the full moonlight must have interfered with ordinary observations were the 20th to 28th, inclusive; on the remaining 21 evenings 240 observations of auroras are reported, or an average of 11 daily; the dates on which the reported number exceeded this average are the 1st, 2d, and 3d. During these three evenings an extensive auroral display occurred, and observations are at hand from the following states on one or more of these dates: Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

The following table gives an abstract of auroral observations made on the evening of the 1st and morning of the 2d:

Auroral display of November 1st.

Date.	Station.	Extent of display.		Remarks.
		Azimuth.	Altitude.	
		°	°	
1	Eastport, Me.		30	Waves of light shooting from w. to e. and extending to zenith.
1	Boston, Mass.		60	Glow changing to red and yellow.
1	Woods Holl, Mass.	110 to 250	20	Diffused white light.
1	New Haven, Conn.	145 to 215	30 to 90	Pale green color. Streamers at intervals nearly to zenith.
1	New London, Conn.	140 to 240	45 to 90	A diffused glow, resembling the dawn. About 12 streamers reaching an altitude of 55°.
1-2	Toms River, N. J.	135 to 225	90	Long narrow strips of pink, red, and white shot up to zenith.
1	Alpena, Mich.	90 to 270	35	Band of white light, with beams of pale straw color moving rapidly back and forth.
1	Boon, Mich.			Arch; beams of yellow light appearing and disappearing rapidly, a motion from w. to e.
1	Marquette, Mich.	225	90	Luminous patches; streamers to 20° s. of zenith.
1-2	Sault Ste. Marie, Mich.	135 to 270	40 to 90	Tea-green color. Waves of light moving from w. to e.
1	Minneapolis, Minn.	180 to 225	90	Streamers of white and rose-color nearly to zenith.
1-2	Bismarck, N. Dak.	110 to 250	40	Pale, diffused light, lasted until 2 a. m.
1	Rapid City, S. Dak.		50	Beams resting on a dark segment.
1-2	Havre, Mont.		10 to 45	Arch, with luminous beams to 30°. Bright flashes to zenith, moving with great rapidity, and having a rolling motion. At 1.20 a. m. flashes to 60° s. of zenith.
1	Miles City, Mont.			Diffused light; later an arch with bright flashes.
1	Rosalie, Wash.	150 to 240	25	Display resembling a hazy light, resting on a dark segment. A few small streamers in n. at 6.10 p. m.

EARTH CURRENTS AND MAGNETIC STORMS.

Notwithstanding the extensive distribution of the aurora of November 1st no account has come to hand of any important disturbance of electric telegraph work, whence we must infer that the ground currents during this aurora were feeble in North America.

STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for November, 1893, of the directors of the various state weather services:

ALABAMA.

Temperature.—The mean was 0.8 above the normal; maximum, 86, at Maple Grove, 4th; minimum, 15, at Chepultepec and Decatur, 25th.

Precipitation.—The average was below the normal; greatest monthly, 5.14, at Thomasville; least monthly, 0.73, at Fort Deposit.

Wind.—Prevailing direction, north.—F. P. Chaffee, Local Forecast Office, Weather Bureau, Montgomery, director.

ARIZONA.

Temperature.—The mean was 3.0 below the normal; maximum, 89, at Buckeye, 1st; minimum, 11, at Flagstaff, 20th; greatest monthly range, 64, at Crittenden; least monthly range, 40, at Peoria.

Precipitation.—The average was 0.20 below the normal; greatest monthly, 1.87, at Payson; least monthly, 0.00, at Teviston.

Wind.—Prevailing direction, southwest.—W. Burrows, Observer, Weather Bureau, Tucson, director.

ARKANSAS.

Temperature.—The mean was 1.0 below the normal; maximum, 82, at Camden, 28d, and at Corning, 22d; minimum, 5, at Winslow, 4th; greatest monthly range, 74, at Keesees Ferry; least monthly range, 48, at Prescott.

Precipitation.—The average was 1.43 below the normal; greatest monthly, 5.71, at Madding; least monthly, 2.03, at Gaines Landing.

Wind.—Prevailing direction, south.—F. H. Clarke, Local Forecast Office.

cial, Weather Bureau, Little Rock, director; G. G. Harkness, Observer, Weather Bureau, assistant.

CALIFORNIA.

Temperature.—The mean was 0.2 below the normal; maximum, 93, at Salton, 8th; minimum, 10, at Boca, 19th; greatest monthly range, 65, at Boca; least monthly range, 21, at Mokelumne Hill.

Precipitation.—The average was 0.13 above the normal; greatest monthly, 15.07, at Fort Ross; least monthly, trace, at Barstow and Nordhoff.

Wind.—Prevailing direction, west.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

COLORADO.

Temperature.—The mean was 1.0 below the normal; maximum, 98, at Downing, 27th; minimum, —21, at Lay, 22d.

Precipitation.—The average was 0.15 above the normal; greatest monthly, 6.45, at Climax; least monthly, 0.00, at Kit Carson.

Wind.—Prevailing direction, west.—*J. J. Gilligan, Observer, Weather Bureau, Denver, director.*

FLORIDA.

Temperature.—The mean was normal; maximum, 88, at Archer, 3d and 4th, and at Plant City, 4th and 5th; minimum, 80, at Moseley Hall, 25th; greatest monthly range, 54, at Archer; least monthly range, 19, at Key West.

Precipitation.—The average was slightly below the normal; greatest monthly, 5.01, at Jupiter; least monthly, 0.48, at Key West.

Wind.—Prevailing direction, northeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

GEORGIA.

Temperature.—Maximum, 87, at Hawkinsville, 4th; minimum, 14, at Clayton, 25th; greatest monthly range, 66, at Hawkinsville; least monthly range, 88, at Dublin.

Precipitation.—Greatest monthly, 3.06, at Thomasville; least monthly, 0.63, at Dublin.

Wind.—Prevailing directions, northeast and east.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

IDAHO.

Temperature.—Maximum, 68, at Martin, 9th; minimum, —9, at Paris, 22d; greatest monthly range, 75, at Paris; least monthly range, 36, at Moscow.

Precipitation.—Greatest monthly, 9.48, at Kootenai; least monthly, 0.07, at Fort Lemhi.

Wind.—Prevailing direction, northwest.—*J. H. Smith, Observer, Weather Bureau, Idaho Falls, director.*

ILLINOIS.

Temperature.—The mean was 0.6 above the normal; maximum, 78, at Rushville, 1st, and at Greenville, 11th; minimum, —9, at Streator, 30th.

Precipitation.—The average was 1.00 below the normal; greatest monthly, 3.67, at Olney; least monthly, 0.76, at Havana.

Wind.—Prevailing direction, northwest.—*John Craig, Observer, Weather Bureau, Springfield, director.*

INDIANA.

Temperature.—The mean was 0.7 below the normal; maximum, 74, at Marengo, 2d; minimum, 6, at Union City, Maury, Lafayette, and Delphi, 24th, and at Hawpatch, 24th and 25th; greatest monthly range, 67, at Worthington; least monthly range, 51, at Laconia.

Precipitation.—The average was 0.83 below the normal; greatest monthly, 6.50, at Muncie; least monthly, 1.40, at Vevay.

Wind.—Prevailing direction, southeast.—*Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was about normal; maximum, 86, at Glenwood, 6th; minimum, —13, at Decorah and Spirit Lake, 30th; greatest monthly range, 92, at Decorah; least monthly range, 60, at Fort Madison.

Precipitation.—The average was 0.50 below the normal; greatest monthly, 2.56, at Davenport; least monthly, 0.05, at Villisca.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

KANSAS.

Temperature.—The mean was 0.3 below the normal; maximum, 86, at Englewood, 2d, at Kiowa, 1st, and at Lakin, 15th; minimum, 0.00, at Lakin, 30th, and at Pleasant Dale, 23d; greatest monthly range, 86, at Lakin; least monthly range, 47, at Fort Riley.

Precipitation.—The average was 0.14 below the normal; greatest monthly, 2.12, at Sedan; least monthly, trace, at Bucklin, Coldwater, and Morton.

Wind.—Prevailing direction, south.—*T. B. Jennings, Observer, Weather Bureau, Topeka, director.*

KENTUCKY.

Temperature.—Maximum, 79, at Harrodsburg, 2d; minimum, —2, at Catlettsburg, 25th; greatest monthly range, 70, at Harrodsburg; least monthly range, 62, at Catlettsburg.

Precipitation.—The average was 0.86 above the normal; greatest monthly, 4.44, at Bowling Green; least monthly, 1.00, at Middlesboro.

Wind.—Prevailing direction, northwest.—*Frank Burke, Local Forecast Official, Weather Bureau, Louisville, director.*

LOUISIANA.

Temperature.—The mean was 0.9 below the normal; maximum, 89, at Cameron, 8d, and at Girard, 5th; minimum, 20, at Minden, 24th; greatest monthly range, 66, at Girard; least monthly range, 38, at Port Eads.

Precipitation.—The average was 2.10 below the normal; greatest monthly, 8.82, at Franklin; least monthly, 2.16, at Winnsboro.

Wind.—Prevailing direction, north.—*R. E. Kerkam, Local Forecast Official, Weather Bureau, New Orleans, director.*

MARYLAND.

Temperature.—Maximum, 73, at Barren Creek Springs, 4th, and at Charlotte Hall, 30th; minimum, 0, at Sunnyside, 26th; greatest monthly range, 66, at Sunnyside; least monthly range, 37, at Cambridge.

Precipitation.—Greatest monthly, 8.27, at Valley Lee; least monthly, 2.01, at Cumberland.

Wind.—Prevailing direction, northwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

MICHIGAN.

Temperature.—The mean was 0.5 below the normal; maximum, 75, at Rockland, 1st; minimum, —2, at Castle Falls, 25th; greatest monthly range, 73, at Rockland; least monthly range, 35, at Arbel.

Precipitation.—The average was 0.12 below the normal; greatest monthly, 7.36, at Gaylord; least monthly, 1.00, at Crystal Falls.

Wind.—Prevailing direction, southwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

MINNESOTA.

Temperature.—The mean was 1.3 below the normal; maximum, 79, at Clearwater, 6th; minimum, —30, at Crookston, 28th; greatest monthly range, 100, at Royalton; least monthly range, 68, at Duluth.

Precipitation.—The average was 0.49 below the normal; greatest monthly, 1.74, at Caledonia; least monthly, 0.12, at Granite Falls.

Wind.—Prevailing direction, northwest.—*E. A. Beals, Observer, Weather Bureau, Minneapolis, director.*

MISSISSIPPI.

Temperature.—The mean was 0.5 below the normal; maximum, 96, at Yazoo City, 11th; minimum, 16, at Aberdeen, 25th; greatest monthly range, 72, at Yazoo City; least monthly range, 45, at Moss Point.

Precipitation.—The average was 0.37 below the normal; greatest monthly, 6.90, at Hattiesburg; least monthly, 0.70, at Moss Point.

Wind.—Prevailing direction, north.—*R. J. Hyatt, Local Forecast Official, Weather Bureau, Vicksburg, director.*

MISSOURI.

Temperature.—The mean was 0.7 below the normal; maximum, 79, at Fayette, 1st; minimum, —1, at McCune, 24th; greatest monthly range, 74, at McCune; least monthly range, 42, at Gordonville.

Precipitation.—The average was 1.07 below the normal; greatest monthly, 4.72, at Gayoso; least monthly, 0.08, at Vancleve.

Wind.—Prevailing direction, northwest.—*J. R. Rippey, Secretary, State Board of Agriculture, Columbia, director; E. H. Nimmo, Observer, Weather Bureau, assistant.*

MONTANA.

Temperature.—The mean was 4.0 below the normal; maximum, 67, at Hogan, 1st, and at Miles City, 5th; minimum, —25, at Glasgow, 29th and 30th; greatest monthly range, 90, at Glasgow; least monthly range, 50, at Virginia City.

Precipitation.—The average was 0.54 below the normal; greatest monthly, 3.58, at Elk Park; least monthly, 0.29, at Virginia City.

Wind.—Prevailing direction, southwest.—*J. M. Sherier, Observer, Weather Bureau, Helena, director.*

NEBRASKA.

Temperature.—The mean was —1.1 below the normal; maximum, 92, at Haigler, 3d; minimum, —10, at Agee, Lynch, Bassett, Creighton, and O'Neill, 30th; greatest monthly range, 95, at Ansley; least monthly range, 51, at Tecumseh.

Precipitation.—The average was 0.86 below the normal; greatest monthly, 1.26, at Hartington; least monthly, trace, at several stations.

Wind.—Prevailing direction, northwest.—*George E. Hunt, Local Forecast Official, Weather Bureau, Omaha, director.*

NEVADA.

Temperature.—The mean was 1.9 below the normal; maximum, 74, at Belleville, 13th; minimum, —8, at Halleck, 22d; greatest monthly range, 66, at Stofel; least monthly range, 46, at Edgewood and South Camp.

Precipitation.—The average was 0.06 below the normal; greatest monthly, 3.81, at Lewers Ranch; least monthly, 0.00, at Mills City.

Wind.—Prevailing direction, southwest.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

NEW ENGLAND.

Temperature.—The mean was 0.2 below the normal; maximum, 72, at Vineyard Haven, 8d; minimum, —1, at Jacksonville, 27th; greatest monthly range, 61, at Taunton; least monthly range, 35, at Block Island.

Precipitation.—The average was 1.88 below the normal; greatest monthly, 3.98, at Long Plain; least monthly, 0.84, at East Templeton.

Wind.—Prevailing direction, southwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, director.*

NEW JERSEY.

Temperature.—The mean was 0.8 below the normal; maximum, 70, at Somerville, 18th; minimum, 11, at Charlotteburg, 27th; greatest monthly range, 58, at Somerville, Toms River, Millville, and Woodbine; least monthly range, 37, at Hightstown.

Precipitation.—The average was 0.25 below the normal; greatest monthly, 4.53, at Hightstown; least monthly, 2.19, at Atlantic City.

Wind.—Prevailing direction, northwest.—*E. W. McGann, Observer, Weather Bureau, New Brunswick, director.*

NEW MEXICO.

Temperature.—Maximum, 76, at Socorro, 1st; minimum, —3, at Halls Peak and Sulphur Hot Springs, 12th; greatest monthly range, 68, at Chama; least monthly range, 40, at Santa Fe.

Precipitation.—Greatest monthly, 0.85, at Chama; least monthly, 0.00, at several stations.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

NEW YORK.

Temperature.—The mean was 0.1 above the normal; maximum, 78, at Watkins, 9th and 11th; minimum, —3, at Lowville, 26th; greatest monthly range, 65, at Lowville; least monthly range, 35, at Cortland and Setauket.

Precipitation.—The average was 0.84 below the normal; greatest monthly, 5.59, at Eden Center; least monthly, 0.53, at Stillwater.

Wind.—Prevailing direction, southwest.—*Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 1.4 below the normal; maximum, 79, at Chapel Hill, 8d; minimum, 8, at Highlands, 25th; greatest monthly range, 64, at Bakersville; least monthly range, 38, at Hatteras.

Precipitation.—The average was 0.86 below the normal; greatest monthly, 8.32, at Hatteras; least monthly, 1.11, at Mocksville.

Wind.—Prevailing direction, northeast.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

NORTH DAKOTA.

Temperature.—The mean was 3.8 below the normal; maximum, 74, at Sheyenne, 9th; minimum, —27, at Gallatin, 24th; greatest monthly range, 95, at Lemert; least monthly range, 72, at Woodbridge.

Precipitation.—The average was 0.07 below the normal; greatest monthly, 1.50, at Woodbridge; least monthly, 0.00, at Minto.

Wind.—Prevailing direction, northwest.—*B. H. Bronson, Observer, Weather Bureau, Bismarck, director.*

OHIO WEATHER AND CROP SERVICE.

Temperature.—The mean was 1.2 below the normal; maximum, 76, at Bucyrus, 9th; minimum, —2, at Auburn, 26th; greatest monthly range, 72, at Hillhouse; least monthly range, 48, at Granville.

Precipitation.—The average was 0.97 below the normal; greatest monthly, 4.03, at Hillhouse; least monthly, 0.71, at Milfordton.

Wind.—Prevailing direction, southwest.—*L. N. Bonham, Columbus, director; C. M. Strong, Observer, Weather Bureau, assistant.*

OKLAHOMA.

Temperature.—The mean was 2.0 below the normal; maximum, 94, at Purcell, 1st; minimum, 9, at Mangum, 23d.

Precipitation.—The average was 1.07 below the normal; greatest monthly, 3.98, at Lehigh; least monthly, 0.10, at Mangum.

Wind.—Prevailing direction, north.—*J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.*

OREGON.

Temperature.—The mean was 1.4 below the normal; maximum, 75, at Langlois, 13th and 14th; minimum, 5, at Crook, 18th and 22d; greatest monthly range, 57, at Crook; least monthly range, 31, at Bandon.

Precipitation.—The average was 2.86 above the normal; greatest monthly, 84.88, at Glenora; least monthly, 0.90, at New Bridge.

Wind.—Prevailing direction, south.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Local Forecast Official, Weather Bureau, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 1.1 below the normal; maximum, 68, at Pittsburg, 2d; minimum, 4, at Saegertown, 26th; greatest monthly range, 69, at Saegertown; least monthly range, 35, at Girardville.

Precipitation.—The average was 0.40 below the normal; greatest monthly, 5.69, at Coatesville; least monthly, 1.16, at Somerset.

Wind.—Prevailing direction, west.—*Under direction of the Franklin Institute, Philadelphia; W. P. Tatham, director; T. F. Townsend, Local Forecast Official, Weather Bureau, assistant.*

SOUTH CAROLINA.

Temperature.—Maximum, 87, at Trial, 3d; minimum, 15, at Greenville, 25th.

Precipitation.—Greatest monthly, 4.98, at Simpsonville; least monthly, 0.86, at Georgetown.

Wind.—Prevailing direction, northeast.—*J. W. Bauer, Observer, Weather Bureau, Columbia, director.*

SOUTH DAKOTA.

Temperature.—The mean was 3.0 below the normal; maximum, 84, at Oelrichs, 4th; minimum, —24, at Webster, 24th; greatest monthly range, 104, at Webster; least monthly range, 68, at Mellette.

Precipitation.—The average was 0.15 below the normal; greatest monthly, 1.20, at Rosebud; least monthly, 0.02, at Faulkton.

Wind.—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

TENNESSEE WEATHER AND CROP SERVICE.

Temperature.—The mean was 0.8 below the normal; maximum, 78, at Riddleton, 9th; minimum, 12, at Pikeville, 16th; greatest monthly range, 68, at Riddleton; least monthly range, 49, at Jacksboro.

Precipitation.—The average was 1.18 below the normal; greatest monthly, 4.90, at Trenton; least monthly, 1.25, at Parksville.

Wind.—Prevailing direction, north.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

TEXAS.

Temperature.—The mean was 1.2 below the normal; maximum, 98, at Wichita Falls, 1st; minimum, 9, at Hartley, 12th; greatest monthly range, 72, at Fort Hancock; least monthly range, 36, at Galveston.

Precipitation.—The average was 0.18 above the normal; greatest monthly, 10.47, at Brenham; least monthly, 0.00, at Fort Hancock and Hartley.

Wind.—Prevailing direction, southeast.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

UTAH.

Temperature.—Maximum, 86, at Fillmore, 7th; minimum, —16, at Scofield, 22d; greatest monthly range, 77, at Randolph; least monthly range, 47, at Lake Park.

Precipitation.—Greatest monthly, 1.70, at Heber; least monthly, 0.02, at Richfield.

Wind.—Prevailing direction, northwest.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

VIRGINIA.

Temperature.—Maximum, 78, at Avon, 13th, at Petersburg and Saluda, 4th; minimum, 8, at Avon, 26th, and at Big Stone Gap, 24th and 25th; greatest monthly range, 70, at Avon; least monthly range, 45, at Cape Henry and Stephens City.

Precipitation.—Greatest monthly, 8.11, at Cape Charles; least monthly, 0.73, at Blacksburg.

Wind.—Prevailing direction, northeast.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

WEST VIRGINIA.

Temperature.—Maximum, 74, at Point Pleasant, 2d, and at Spencer, 5th; minimum, 3, at Marlinton, 25th; greatest monthly range, 65, at Spencer; least monthly range, 46, at Charlestown and Martinsburg.

Precipitation.—Greatest monthly, 4.40, at Pleasant Hill; least monthly, 0.30, at Spencer.

Wind.—Prevailing direction, west.—*W. W. Dent, Observer, Weather Bureau, Parkersburg, director.*

WISCONSIN.

Temperature.—The mean was 1.0 below the normal; maximum, 79, at Prairie du Chien, 1st; minimum, —24, at Osceola; greatest monthly range, 94, at Osceola; least monthly range, 57, at Manitowoc.

Precipitation.—The average was 0.50 below the normal; greatest monthly, 2.35, at Sharon; least monthly, 0.65, at Hayward.

Wind.—Prevailing direction, northwest.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

WYOMING.

Temperature.—Maximum, 70, at Wheatland, 9th; minimum, —17, at Sheridan, 23d; greatest monthly range, 81, at Sheridan; least monthly range, 59, at Cheyenne.

Precipitation.—Greatest monthly, 2.51, at Fort Yellowstone; least monthly, 0.06, at Laramie.

Wind.—Prevailing direction, west.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*